

CLAIM AMENDMENTS:

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing Of Claims

Claim 1 (Currently amended): A power transmission chain, comprising:

a plurality of link units aligned in a traveling direction of the chain;

a plurality of connecting members that link the plurality of link units to one another in a manner so as to be bendable; and

guiding members provided correspondingly to the respective connecting members, wherein:

each of the link units includes a plurality of links aligned in a width direction of the chain orthogonal to the traveling direction of the chain;

each of the links includes first and second through-holes aligned in the traveling direction of the chain for a corresponding connecting member to be inserted therethrough;

each of the connecting members includes first and second power transmission members; and

either one of the first and second power transmission members is guided by the guiding member, and consequently the one power transmission member moves to the other transmission member while coming into contact with the other power transmission member in a contact state including at least one of rolling contact and sliding contact;

both a corresponding first power transmission member and a corresponding second power transmission member are respectively fit into the first through-hole in each of the links in a manner so as to enable relative movements;

both a corresponding first power transmission member and a corresponding second power transmission member are respectively fit into the second through-hole in each of the links in a manner so as to enable relative movements;

the guiding members including first and second guiding members being provided, respectively, at each end portion of a pair of end portions of a corresponding connecting member as the guiding member, the first and second guiding members cooperating to prevent falling off of the corresponding connecting member and the corresponding link;

the first guiding member is shaped like a disc and includes a first insert hole at its center, to which a corresponding first power transmission member is fixed and into which a corresponding second power transmission member is fit with a play;

the first insert hole includes a first guiding surface that guides the corresponding second power transmission member for causing the corresponding second power transmission member to come into contact with the corresponding first power transmission member in a contact state including at least one of rolling contact and sliding contact;

the second guiding member includes a second insert hole, to which a corresponding second power transmission member is fixed and into which a corresponding first power transmission member is fit with a play;

the second insert hole includes a second guiding surface that guides the corresponding first power transmission member for causing the corresponding first power transmission member to come into contact with the corresponding second power transmission member in a contact state including at least one of rolling contact and sliding contact; and

the first guiding member and the second guiding member are separated from each other.

Claim 2 (original): The power transmission chain according to Claim 1, wherein each of the links further includes a communication groove through which the first and second through-holes communicate with each other.

Claims 3 –11 (Cancelled)

Claim 12 (Currently amended): The power transmission chain according to Claim ~~[[11]]~~¹, wherein the first insert hole of the first guiding member has an inner peripheral surface that includes a fitting portion and a loosely fitting portion, and the corresponding first power transmission member is fixed by being press-fit into said fitting portion ~~the first insert hole of the first guiding member.~~

Claim 13 (original): The power transmission chain according to Claim 1, wherein a locus of movement of a contact point between the first and second power transmission members of each of the connecting members shape an involute curve.

Claim 14 (Currently amended): The power transmission chain according to Claim [[13]] 1, wherein:

the plurality of connecting members include the first and second connecting members;

~~the locus loci of the movement of the contact points~~ of the first and second power transmission members of the first connecting members ~~and the locus are different from loci of the movement of the contact points~~ of the first and second power transmission members of the second connecting members ~~are different from each other~~; and

at least one of the first connecting members and the second connecting members are arrayed randomly at least in a partial region of the power transmission chain in the traveling direction of the power transmission chain.

Claim 15 (Currently amended): The power transmission chain according to Claim 1, wherein:

the plurality of link units include link units of a first specification and link units of a second specification;

a disposition interval between ~~the~~a first power transmission member inserted through the first through-hole and ~~the~~a first power transmission member inserted through the ~~[[a]]~~ second through-hole in each link of the link units of the first specification is relatively long;

a disposition interval between ~~the~~a first power transmission member inserted through the first through-hole and ~~the~~a first power transmission member inserted through the second through-hole in each link of the link units of the second specification is relatively short; and

at least one of the link units of the first specification and the link units of the second specification are arrayed randomly at least in a partial region of the power transmission chain in the traveling direction of chain.

Claim 16 (Previously presented): A power transmission device, comprising:

first and second pulleys having, respectively, a pair of sheave surfaces that oppose to each other in a shape of a circular conical surface,

wherein power is transmitted between the first and second pulleys via the power transmission chain according to claim 1.

Claim 17 – Claim 18 (Cancelled)

Claim 19 (Previously presented): A power transmission device, comprising:

first and second pulleys having, respectively, a pair of sheave surfaces that oppose to each other in a shape of a circular conical surface,

wherein power is transmitted between the first and second pulleys via the power transmission chain according to claim 13.

Claim 20 (Previously presented): A power transmission device, comprising:

first and second pulleys having, respectively, a pair of sheave surfaces that oppose to each other in a shape of a circular conical surface,

wherein power is transmitted between the first and second pulleys via the power transmission chain according to claim 15.

Claim 21 (New): A power transmission chain, comprising:

a plurality of link units aligned in a traveling direction of the power transmission chain, each of the link units including a plurality of links aligned in a width direction of said power transmission chain orthogonal to the traveling direction, each of the links including first and second through-holes aligned in the traveling direction;

a plurality of first and second connecting members linking the plurality of link units in a bendable manner, each of said first and second connecting members including a first power transmission member and a second power transmission member, one of said first connecting members being inserted

through the first through-holes of the plurality of links of each link unit, one of said second connecting members being inserted through the second through-holes of the plurality of links of each link unit, in a manner that enables relative movements between the plurality of links and the first and second connecting members; and

a plurality of separate disc-shaped first and second guiding members, one of said first guiding members being disposed at each end of a corresponding one of said first connecting members, and one of said second guiding members being disposed at each end of a corresponding one of said second connecting members, wherein

each of said first guiding members includes a first insert hole, to which a corresponding first power transmission member is fixed and into which a corresponding second power transmission member is fit with a play, the first insert hole including a first guiding surface that guides the corresponding second power transmission member by causing the corresponding second power transmission member to come into contact with the first power transmission member in a first contact state including at least one of a rolling contact and a sliding contact; and

each of said second guiding member includes a second insert hole, to which a corresponding second power transmission member is fixed and into which a corresponding first power transmission member is fit with a play, the second insert hole including a second guiding surface that guides the corresponding first power transmission member by causing the

corresponding first power transmission member to come into contact with the second power transmission member in a second contact state including at least one of the rolling contact and the sliding contact.